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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/697,963   | 10/30/2003  | Thomas H. Massie     | SNS-011             | 7598             |
| 51414  | 7590        | 07/11/2007           | EXAMINER            |                  |
| GOODWIN PROCTER LLP<br>PATENT ADMINISTRATOR<br>EXCHANGE PLACE<br>BOSTON, MA 02109-2881 |             |                      | FATAHI YAR, MAHMOUD |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
| 2629   |             |                      |                     |                  |
| MAIL DATE  |             | DELIVERY MODE        |                     |                  |
| 07/11/2007   |             | PAPER                |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|------------------------------|------------------------|---------------------|--|
|                              | 10/697,963             | MASSIE ET AL.       |  |
| Examiner                     | Art Unit               |                     |  |
| Mike Fatahiyar               | 2629                   |                     |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 12 April 2007.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-51 is/are pending in the application.  
4a) Of the above claim(s) 27-51 is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-26 is/are rejected.  
7)  Claim(s) 15 is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 01 July 0204 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 7/22/05 and 7/28/04.  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date.       .  
5)  Notice of Informal Patent Application  
6)  Other:       .

## DETAILED ACTION

1. Applicant's election with traverse of Group I (i.e., claims 1-26) in the reply filed on 4/12/07 is acknowledged. The traversal is on the ground(s) that there is solely a single independent claim(i.e., claim 1), and all dependent claims include all of the limitations of independent claim 1. This is not found persuasive because the other groups of claims(i.e., I, II, III and IV) are drawn to details of different aspect of inventions(such as details of the user interface; details of the docking station, details of a direct driving assembly and details of internal temperature monitoring of the haptic interface) which have acquired a separate status in the art in view of their different classification.

The requirement is still deemed proper and is therefore made FINAL.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 12 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Maclean et al(6,529,183B1) in view of Rowe et al(6,344,848B1).

Maclean et al discloses a force reflective haptic interface(501) including at least three degrees of freedom and a user interface(502A, 502B, 502C) wherein the user interfaces are detachable and interchangeable and it may be any kind of input devices(see column 10, lines 27-62; column 15, lines 39-67 and column 16). Maclean et al substantially show all the features of the above claims except for the "nose section

and a user connection section which is detachable and interchangeable", "jack and chuck arrangement" and "multiple components that interlock without requiring a fastener". However, Rowe et al is cited to show that the concept of a stylus assembly made of multiple detachable sections which are interchangeable wherein a user connection section(110) couples to a nose section(120) using any kind of coupling of fasteners(column 3, lines 20-46) and the stylus has a housing which has multiple components that interlock without requiring a fastener(see figures 4A-4D). Thus, it would have been obvious to one of ordinary skill in the art to modify the system on Maclean et al with the above noted teachings of Rowe et al such that to the tagged objects(502A-502C) would have a nose section and a user section which are detachable and interchangeable which are coupled together with jack and chuck arrangement and the housing of a tagged object includes multiple components that interlock without requiring any fasteners because both references are related to use of an interface device for inputting coordinated information.

4. Claims 5-11 and 17-26 rejected under 35 U.S.C. 103(a) as being unpatentable over Maclean et al and Rowe et al as applied to claim 1 above, and further in view of Haanpaa et al(2001/0002098A1).

Maclean et al and Rowe et al are discussed above. Haanpaa et al cited to show that the concept of utilizing a user interface device having a first and a second user input (17) which are customizable and adaptable to modify a function of the user interface, wherein the user interface is adapted to function as a force feedback device and a computer mouse and a digitizer and having a docking station(8) which has a

sensor in a force reflective haptic device having at least three degrees of freedom is old([0043], [0053 – 0054]). Thus, it would have been obvious to one of ordinary skill in the art to apply the above noted teachings of Haanpaa et al to the modified system of Maclean et al such that to provide a first and a second user input which can modify a function of the user interface(502A) and wherein the interface is adapted to function as a force feedback device and a compute mouse or a digitizer and having a docking station with sensor because all the applied references are related to a stylus user interface for inputting coordinate information and further because the secondary reference to Haanpaa et al like the primary reference to Maclean et al is directed to a haptic force reflective device including at least three degrees of freedom.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maclean et al and Rowe et al as applied to claim 1 above, and further in view of Ichikawa et al(4,837,734).

Maclean et al and Rowe et al are discussed above. Ichikawa et al is cited to show that the concept of utilizing a yoke assembly(107) for coupling and/or gripping is old. Thus, it would have been obvious to one of ordinary skill in the art to apply the above noted teaching of Ichikawa et al to the modified system of Maclean et al such that to provide a yoke assembly for coupling to the nose section of a user interface(502A) as opposed to the receptacle(501C) of Maclean et al because both perform the same function of gripping the nose section of the user interface.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maclean et al, Rowe et al and Ichikawa et al as applied to claim 13 above, and further in view of Thornburg et al(4,318,096).

Maclean et al, Rowe et al and Ichikawa et al are discussed above. Thornburg et al is cited to show that the concept of having a pair of projections(22) extending from the nose section of a user interface device is old. Therefor, it would have been obvious to one of ordinary skill in the art to apply the noted teaching of Thornburg et al to the modified system of Maclean et al such that to provide a pair of projections for the user interface(502A) so as to provide a better gripping means for a two hinged halves of a yoke assembly for easy movement of the user interface.

7. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lapstun et al, Murakami et al, Kobayashi et al and Oueslati et el are made of record to show various types of input pen device for inputting coordinate information.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Fatahiyar whose telephone number is (571)272-7688. The examiner can normally be reached on Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER

*MF*  
M. Fatahiyar

July 7, 2007